

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1 to 9. (Canceled).

10. (Previously Presented) A sheathed-element glow plug for a self-igniting internal combustion engine, comprising:

a heating element projecting into a combustion chamber of the internal combustion engine;

a current feed-through via which a heating current for the heating element is fed through an opening in the combustion chamber; and

a switch positioned in the region of the current feed-through, wherein the heating current is adapted to be controlled by opening and closing the switch.

11. (Previously Presented) The sheathed-element glow plug as recited in Claim 10, wherein a control circuit for the switch is positioned in the region of the current feed-through, and wherein the control circuit produces a signal for opening and closing the switch.

12. (Previously Presented) The sheathed-element glow plug as recited in Claim 11, further comprising a first feed line adapted to be connected to a terminal for a supply voltage for the heating current, and a second feed line connected to the control circuit for transmitting a control signal to the control circuit.

13. (Currently Amended) The ~~control circuit~~ sheathed-element glow plug as recited in Claim 11, further comprising an input for a line, wherein the input is connected to the switch and the control circuit, and wherein an operating voltage and a control signal for the control circuit are adapted to be simultaneously applied via the input.

14. (Previously Presented) The sheathed-element glow plug as recited in Claim 11, wherein the control circuit includes a means for determining the

temperature of the heating element, and wherein the heating current is controlled as a function of a signal from said means.

15. (Previously Presented) The sheathed-element glow plug as recited in Claim 10, wherein the heating element is one of a metallic and ceramic glow element.

16. (Previously Presented) The sheathed-element glow plug as recited in Claim 15, wherein the glow element is adapted to be fastened in the opening of the combustion chamber by use of a housing, and wherein the housing is also adapted to house the switch and the control unit.

17. (Previously Presented) The sheathed-element glow plug as recited in Claim 16, wherein the switch and the control circuit are integrated on one chip.

18. (Previously Presented) The sheathed-element glow plug as recited in Claim 17, wherein the chip is applied in the housing without packaging.

19. (New) The sheathed-element glow plug as recited in Claim 10, further comprising: a housing, the heating element connectible to a ground potential of the housing.

20. (New) The sheathed-element glow plug as recited in Claim 10, further comprising a regulator configured to adjust the heating current.

21. (New) The sheathed-element glow plug as recited in Claim 10, wherein the switch includes a transistor.

22. (New) The sheathed-element glow plug as recited in Claim 10, wherein the switch includes a chip connectible via one of at least one soldering element and at least one wire to at least one feed line.

23. (New) The sheathed-element glow plug as recited in Claim 12, wherein the first feed line is adapted to be connected to the terminal in a direction facing away from the combustion chamber.

24. (New) The sheathed-element glow plug as recited in Claim 16, wherein the housing includes a raised helical rib for a screwing, the glow element adapted to be fastened in the opening of the combustion chamber via the screwing.

25. (New) A sheathed-element glow plug for a self-igniting internal combustion engine, comprising:

- a heating element projecting into a combustion chamber of the internal combustion engine;

- a current feed-through via which a heating current for the heating element is fed through an opening in the combustion chamber;

- a switch configured to control the heating current by opening and closing the switch; and

- a housing containing the heating element, the current feed-through, and the switch.

26. (New) The sheathed-element glow plug as recited in Claim 25, wherein the housing includes a raised helical rib for a screwing, the heating element adapted to be fastened in the opening of the combustion chamber via the screwing, the switch positioned in the region of the raised helical rib.